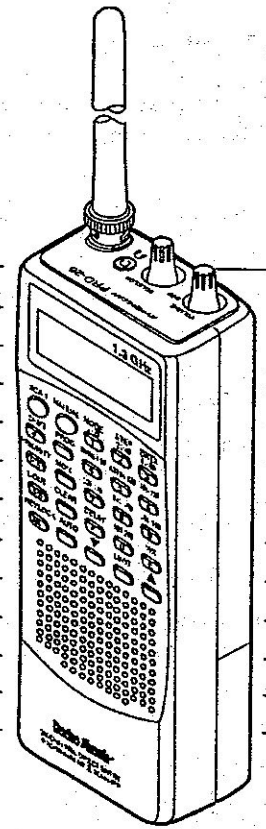
Cat. No. 20-506

OWNER'S MANUAL

PRO-26
Portable 200-Channel Scanner with Continuous 25 MHz to 1.3 GHz Coverage

Please read before using this equipment.



RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 1 year from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

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This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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RADIO SHACK
A Division of Tandy Corporation
Fort Worth, Texas 76102

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UBZZ01249ZB
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Radio Shack®

INTRODUCTION

Your Radio Shack PRO-26 Portable 200-Channel Scanner lets you in on all the action! This scanner gives you direct access to over 76,000 exciting frequencies used by police and fire departments, ambulance and transportation services, amateur radio, aircraft communications, Citizen's Band, and commercial FM and television broadcasts. You can select up to 200 channels for your scanner to scan.

The secret to your scanner's ability to scan so many frequencies is its custom-designed microprocessor—a tiny, built-in computer.

Your scanner also has these features:

Triple Conversion Superheterodyne Receiver—virtually eliminates any interference from IF (intermediate frequency) images, so you hear only the selected frequency.

Continuous Coverage—receives from 25 MHz to 1.3 GHz (excluding cellular service frequencies).

HyperScan—scans through programmed channels at 50 channels per second.

Ten Channel-Storage Banks—let you store 20 channels in each of 10 banks to group frequencies so you can easily identify calls.

Monitor Memories—let you store up to 10 frequencies you locate during a frequency search which you can then transfer into channels.

Limit Search—lets you search for transmissions within a set range.

Direct Search—lets you search from the current frequency.

Search Skip—lets you select up to 50 frequencies for the scanner to skip during a search, so you can avoid frequencies you have already discovered.

Auto Sort—lets you scan the stored channels in order from lowest to highest frequency to increase scanning speed.

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HyperSearch—lets you set the scanner to search at 300 steps/second (in 5 kHz steps only).

Auto Store—quickly finds and automatically stores active frequencies into the selected banks (does not store the frequency if it is already stored in another channel).

2- or 4-Second Scan Delay—delays scanning for 2 or 4 seconds before moving to another channel, so you can hear more replies.

Data Skip—skips nonmodulated signals or data signals during a limit or direct search.

Lock-Out Function—prevents channels you select from being scanned.

Priority Channel—checks a specified channel every 2 seconds so you do not miss important calls.

Automatic Modulation Mode—selects the modulation method—narrow-band frequency modulation (NFM), wide-band frequency modulation (WFM), or amplitude modulation (AM)—most often used for each band, and lets you manually override the preset mode (see "Changing the Modulation Mode").

Selectable Frequency Step—lets you select the frequency step during a limit or direct search.

Weather Band Key—scans the preprogrammed weather frequencies to keep you informed of the most current weather conditions.

Attenuator—adjusts the scanner's sensitivity to help eliminate interference from strong, nearby transmitters.

Low Battery Indicator—warns you when battery power gets low.

Memory Backup—keeps the channel frequencies stored in memory for up to 3 days during a power loss.

Optional Power Sources—let you power your scanner from alkaline batteries, rechargeable batteries, or AC or DC power, and even recharge rechargeable batteries in the scanner.

Your scanner can receive all of these bands:

Range	Default Mode	Frequency Step
25.0000 – 28.9950 MHz	AM	5.0 kHz
29.0000 – 53.9950 MHz	NFM	5.0 kHz
59.7500 – 71.7500 MHz	WFM	6.0 MHz
72.0000 – 75.9950 MHz	NFM	5.0 kHz
81.7500 – 87.7500 MHz	WFM	6.0 MHz
88.1000 – 107.9000 MHz	WFM	200.0 kHz
108.0000 – 136.9875 MHz	AM	12.5 kHz
137.0000 – 173.9950 MHz	NFM	5.0 kHz
179.7500 – 215.7500 MHz	WFM	6.0 MHz
216.0000 – 224.9950 MHz	NFM	5.0 kHz
225.0000 – 399.9875 MHz	AM	12.5 kHz
400.0000 – 511.9875 MHz	NFM	12.5 kHz
517.7500 – 805.7500 MHz	WFM	6.0 MHz
806.0000 – 823.9375 MHz	NFM	12.5 kHz
851.0000 – 868.9375 MHz	NFM	12.5 kHz
896.1125 – 1300.0000 MHz	NFM	12.5 kHz

The following Weather Service channels are preprogrammed into your scanner:

- 162.4000 MHz (NFM)
- 162.4250 MHz (NFM)
- 162.4500 MHz (NFM)
- 162.4750 MHz (NFM)
- 162.5000 MHz (NFM)
- 162.5250 MHz (NFM)
- 162.5500 MHz (NFM)

For your records, we urge you to record your scanner's serial number in the space below. You will find the serial number on the scanner's back panel.

Serial Number: _____

FCC NOTICE

Your scanner might cause radio or TV interference even when it is operating properly. To determine if your scanner is causing the interference, turn off your scanner. If the interference goes away, your scanner was causing it. Try to eliminate the interference by:

- Moving your scanner away from the receiver
- Connecting your scanner to an outlet that is on a different electrical circuit from the receiver
- Contacting your local Radio Shack store for help

If you cannot eliminate the interference, the FCC requires that you stop using your scanner.

Note: Mobile use of this scanner is unlawful or requires a permit in some areas. Check the laws in your area.

This device complies with Part 15 of *FCC Rules*. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

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PREPARATION

POWER SOURCES

You can power your scanner from any of three sources:

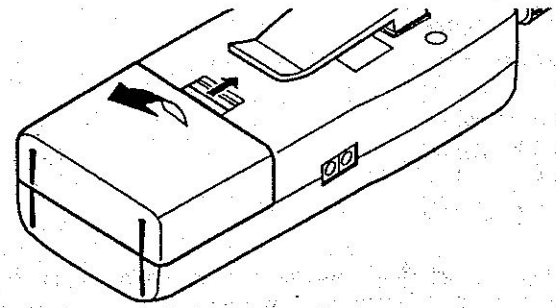
- Internal batteries
- Standard AC power (using an optional AC adapter)
- Vehicle battery power (using an optional DC adapter)

Using Internal Batteries

You can power your scanner with four AA batteries. For the longest life and best performance, we recommend alkaline batteries (such as Cat. No. 23-552). Or, you can use rechargeable nickel-cadmium batteries (Cat. No. 23-125).

Follow these steps to install or replace batteries.

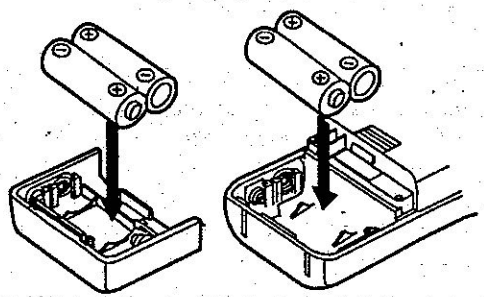
1. Push up the tab on the back of the scanner and lift open the battery compartment cover.



2. Remove any old batteries from the compartment and cover.

   Caution: Always dispose of old non-rechargeable batteries promptly and properly. Do not bury or burn them.

3. Install two batteries in the compartment and two in the cover as indicated by the polarity symbols (+ and –) marked inside the compartment and cover.



Caution: Use only fresh, AA alkaline, nickel-cadmium, or general purpose batteries.

4. Replace the cover.

When the batteries are low, your scanner beeps every 15 seconds and flashes BATT. Lo. If this happens, immediately replace or recharge all four batteries. See "Important Information About the External Power Jacks" and "Charging Nickel-Cadmium Batteries."

Important Information About the External Power Jacks

The scanner has two external power jacks—**POWER** and **CHARGE**. You should understand the purpose of each jack before you connect any adapter to the scanner.

The **POWER** jack lets you connect an external AC or DC adapter to power the scanner. You can plug an adapter into this jack with either rechargeable or non-rechargeable batteries installed.

The **CHARGE** jack lets you connect an external AC or DC adapter to power the scanner and also charge the internal batteries. Use the **CHARGE** jack only when rechargeable nickel-cadmium batteries are installed.

Warning: Never connect either adapter to the **CHARGE** jack with non-rechargeable batteries installed. If you try to recharge non-rechargeable batteries, they become very hot and could explode.

Charging Nickel-Cadmium Batteries

The scanner has a built-in charging circuit that lets you recharge nickel-cadmium batteries while they are in the scanner. To charge the batteries, simply connect an AC adapter (Cat. No. 20-188) or a DC adapter (Cat. No. 270-1560) to the scanner's **CHARGE** jack.

Warning: Do not connect either adapter to the scanner's **CHARGE** jack if you have installed non-rechargeable batteries (standard, extra-life, or alkaline). Non-rechargeable batteries become hot and can even explode if you try to recharge them.

Fully discharged batteries take about 10 to 18 hours to recharge. You can operate the scanner while recharging nickel-cadmium batteries, but the charging time is lengthened.

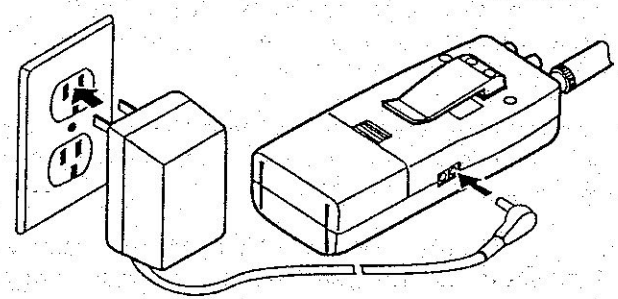
Important: This product can use rechargeable nickel cadmium batteries. At the end of their useful life, the batteries must be recycled or disposed of properly. Contact your local, county, or state hazardous waste management authorities for information on recycling or disposal programs in your area. Some options that might be available are: municipal curb-side collection, drop-off boxes at retailers, recycling collection centers, and mail-back programs.

Using AC Power

To power the scanner from AC power, you need an AC adapter (such as Cat. No. 20-188).

Caution: You must use an AC adapter that supplies 9 volts with the center tip set to negative. It must deliver at least 300 milliamps, and its plug must properly fit the scanner's **POWER** jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the scanner or the adapter.

Plug the adapter's barrel plug into the scanner's **POWER** jack. Then plug the adapter's power module into a standard AC outlet.



When you finish using the AC adapter, disconnect it from the AC outlet first. Then disconnect it from the scanner.

Using Vehicle Battery Power

To power the scanner from your vehicle's battery power, you need a DC adapter (such as Cat. No. 270-1560).

Cautions:

- You must use a DC adapter that supplies 9 volts with the center tip set to negative. It must deliver at least 300 milliamps, and its plug must properly fit the scanner's **POWER** jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications could damage the scanner or the adapter.
- Your vehicle must have a 12-volt DC, negative-ground electrical system.
- To protect your vehicle's electrical system, be sure the adapter is connected to the cigarette-lighter socket only when it is also connected to the scanner.

Follow these steps to use vehicle battery power.

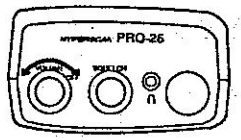
1. Connect the adapter's orange barrel plug to the adapter's cable with the tip set to – (negative).
2. Set the adapter to supply 9 volts.
3. Insert the barrel plug into the scanner's **POWER** jack.
4. Plug the other end of the adapter into your vehicle's cigarette-lighter socket.

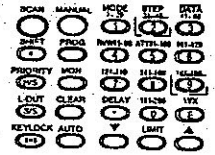
Note: If the scanner does not operate properly when you use a DC adapter, unplug the adapter from the lighter socket and clean the socket to remove ashes and other debris. Also, check the vehicle's and DC adapter's fuses.

RESETTING THE SCANNER

If the scanner's display locks up or does not work properly after you connect a power source, you might have to reset the scanner.

Caution: This procedure clears all the information you have programmed into the scanner. Use this procedure only when you are sure your scanner is not working properly.

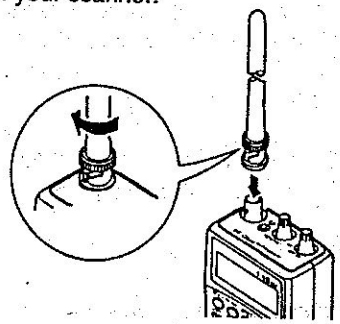




1. Turn off the scanner by turning **VOLUME** fully counterclockwise.
2. While you press and hold down the **2** and **9** keys, turn on the scanner by turning **VOLUME** clockwise.

CONNECTING THE ANTENNA

Follow these steps to attach the supplied flexible antenna to the connector on top of your scanner.



1. Slip the slots in the antenna connector over the tabs on the jack.
2. Press down and rotate the antenna's base clockwise until it locks into place.

Connecting an Optional Antenna

The antenna connector on your scanner makes it easy to use with a variety of antennas, such as an external mobile antenna or outdoor base antenna. Your local Radio Shack store sells a variety of antennas.

Use coaxial cable to connect an outdoor antenna. Always use 50-ohm coaxial cable, such as RG-58 or RG-8/M. For lengths over 50 feet, use RG-8 low-loss dielectric coaxial cable. You might also need a BNC connector (Cat. No. 278-103 or 278-185) to connect an optional antenna.

Warning: When installing or removing an outdoor antenna, follow all cautions and warnings included with the antenna.

CONNECTING AN EARPHONE/ HEADPHONES

For private listening, plug an earphone (Cat. No. 33-175) or mono headset (Cat. No. 20-210) into the ∩ jack on top of your scanner. This automatically disconnects the internal speaker.

Listening Safely

To protect your hearing, follow these guidelines when you use an earphone or headphones:

- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

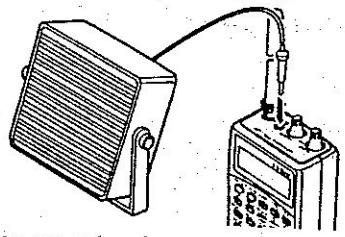
Traffic Safety

Do not wear headphones or an earphone while you drive a vehicle or ride a bicycle. This can create a traffic hazard and is illegal in some areas.

Even though some headphones and earphones are designed to let you hear some outside sounds when you listen at normal levels, they still present a traffic hazard.

CONNECTING AN EXTENSION SPEAKER

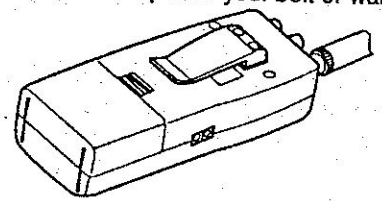
In a noisy area, an extension speaker (such as Cat. No. 21-549), positioned in the right place, might provide more comfortable listening. Plug the speaker cable's ⅛-inch mini-plug into the scanner's 🎧 jack.



Note: Connecting an extension speaker disconnects the scanner's built-in speaker.

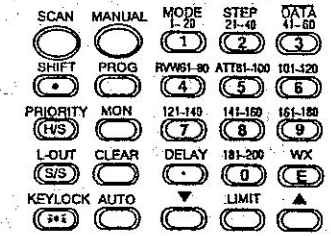
USING THE BELT CLIP

You can use the supplied belt clip for hands-free carrying when you are on the go. Use the two supplied screws to attach the belt clip to the scanner. Then slide the belt clip over your belt or waistband.



UNDERSTANDING YOUR SCANNER

A LOOK AT THE KEYBOARD



A quick glance at this section should help you understand each key's function(s).

SCAN—scans through the programmed channels.

MANUAL—stops scanning and lets you directly enter a channel number.

H/S/PRIORITY—sets and turns on and off priority for a particular channel; turns on and off hyper scan mode.

S/S/L/OUT—lets you lock out a selected channel.

KEYLOCK/—locks/unlocks the keypad to prevent accidental entries; turns on the display light for 15 seconds.

PROG—programs frequencies into channels.

MON—accesses the 10 monitor memories. See "Moving a Frequency from a Monitor Memory to a Channel" on Page 26.

CLEAR—clears an incorrect entry.

./DELAY—inputs a decimal point when you set a frequency; programs a 2- or 4-second delay for the selected channel.

LIMIT—turns on the limit search mode. See "Searching For and Temporarily Storing Active Frequencies" on Page 22.

▲ and ▼—selects the scan and search direction.

Number Keys—each key has a single digit with a range of numbers printed above it. The single digits refer to the number of a channel or frequency entered. The range of numbers (21-40, for example) indicates the channels that make up a memory bank. See "Understanding Channel Storage Banks" on Page 19.

SHIFT—selects **MODE**, **STEP**, **DATA**, **RVW**, and **ATT** when used with the corresponding number keys.

For example, to use a function printed above keys 1–5 (**MODE**, **STEP**, **DATA**, **RVW**, and **ATT**), press **SHIFT** and then press the desired key.

MODE—selects the auto or selectable modulation mode function.

STEP—lets you select the frequency step during a direct or limit search.

DATA—turns on or off the data signal skip feature.

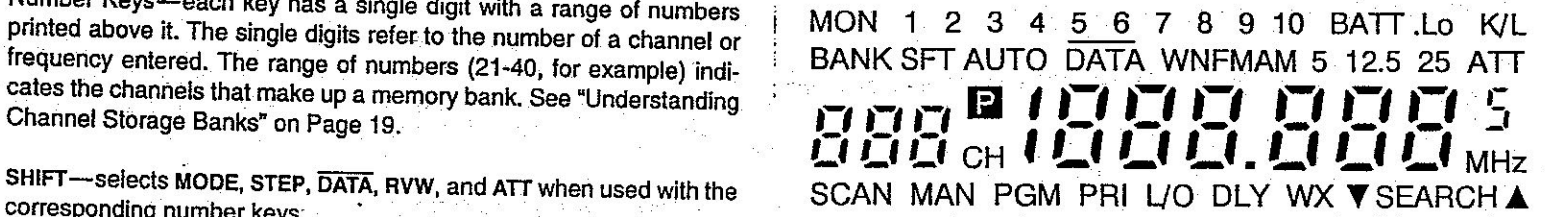
RVW—lets you review locked-out channels or search skip memory.

ATT—turns on or off the attenuator for each channel to help reduce interference from strong, nearby transmitters.

E/WX—enters the frequency when you program channels, and starts scanning the weather frequencies when you are not programming channels.

AUTO—lets you automatically program frequencies into selected banks.

A LOOK AT THE DISPLAY



The display has several indicators that show the scanner's current operating mode. A quick look at the display will help you understand how your scanner operates.

MON—appears during a search or when you listen to a monitor memory. The number to the right of this indicator shows the current monitor memory number. See "Listening to Monitor Memories" on Page 26.

BANK—shows which channel-storage banks are turned on. See "Channel-Storage Banks" on Page 19.

SFT—appears when you press **SHIFT**.

AUTO—appears when the scanner is in the auto store or auto sort modes.

DATA—appears when you turn on the data skip function.

NFM/WFM/AM—shows the current modulation mode; flashes when you override the default mode.

5, 12.5, 25—shows which frequency step the scanner is set to during a limit or direct search.

K/L—appears when you lock the keypad.

BATT. Lo—flashes when the battery is low.

CH—digits that precede this indicator show which of the 200 channels the scanner is tuned to.

P—appears when you listen to the priority channel.

MHz—digits that precede this indicator show which frequency the scanner is tuned to.

SCAN—appears when you scan channels.

MAN—appears when you manually select a channel.

ATT—appears when you use the attenuator function to adjust the scanner's sensitivity.

PGM—appears while you program frequencies into the scanner's channels.

PRI—appears when you set the scanner to scan the selected priority channel every 2 seconds.

L/O—appears when you manually select a locked channel.

DLY—appears when you program a channel for a 2- or 4-second delay or when you listen to a channel that has been programmed with the delay feature.

WX—appears when the scanner is in the weather band mode.

▲ and ▼—indicates the scan and search direction.

SEARCH—appears during a limit search (-L- also appears), a direct frequency search (-d- also appears), a hold direct search (-h- also appears), and a hold limit search (-H- also appears).

UNDERSTANDING CHANNEL-STORAGE BANKS

You can store up to 210 frequencies into your scanner's memory. You store each frequency into either a permanent memory, called a channel, or a temporary memory, called a monitor. This scanner has 200 channel memories and 10 monitor memories.

Channel-Storage Banks

To make it easier to identify and select the channels you want to listen to, channels are divided into 10 channel-storage banks of 20 channels each. Use each channel-storage bank to group frequencies, such as the police department, fire department, ambulance services, or aircraft (see "Guide to the Action Bands" on Page 36).

For example, the police department might use four frequencies, one for each side of town. You could program the police frequencies starting with Channel 1 (the first channel in Bank 1) and program the fire department starting with Channel 21 (the first channel in Bank 2).

Monitor Memories

The scanner also has 10 monitor memories. You can use these memories to temporarily store frequencies while you decide whether to save them into channels. This is handy for quickly storing an active frequency when you search through an entire band. See "Searching For and Temporarily Storing Active Frequencies" on Page 22.

OPERATION

TURNING ON THE SCANNER / SETTING VOLUME AND SQUELCH

1. Rotate **VOLUME** ¼ turn clockwise to turn on the scanner.
2. Rotate **SQUELCH** fully counterclockwise.
3. Slowly turn **SQUELCH** clockwise until the hissing stops.

Note: To hear a weak or distant station, turn **SQUELCH** counterclockwise. You might hear hissing, but you will not miss any transmissions.

STORING FREQUENCIES

You can store up to 200 frequencies into your scanner's channels. Good frequency references are Radio Shack's "Police Call Guide including Fire and Emergency Services," "Official Aeronautical Frequency Directory," and "Maritime Frequency Directory." We update these directories every year, so be sure to get a current copy.

If you do not have a frequency reference for your area, use a limit or direct search to find a transmission. See "Searching For and Temporarily Storing Active Frequencies" on Page 22 or "Guide to the Action Bands" on Page 36.

Follow these steps to manually store frequencies.

1. Press **MANUAL**. Enter the channel number you want to program.
2. Press **PROG**. **PGM** appears on the display.
3. Enter a frequency.
4. Press **E** to store the frequency.

Notes:

- If you made a mistake in Step 3, **Error** appears on the display and the scanner sounds three beeps. Press **CLEAR**, then proceed again from Step 3.
- Your scanner rounds frequencies down to the next valid frequency. For example, if you enter 151.473, the scanner accepts this as 151.470.

5. Repeat Steps 1–4 to program more channels.

Note: To program the next channel, repeat Steps 2–4.

SEARCHING FOR AND TEMPORARILY STORING ACTIVE FREQUENCIES

Limit Search

Limit search lets you search within a specific range of frequencies.

1. Press **PROG**, then **LIMIT**. `Lo` appears on the display.
2. Enter the lower limit of the frequency range you want to search.
3. Press **E/WX**, then **LIMIT**. `Hi` appears on the display.
4. Enter the upper limit of the frequency range.
5. Press **E/WX**.
6. Press ▼ to search from the upper to the lower limit, or press ▲ to search from the lower to the upper limit. `-L-` appears.
7. When the scanner stops on a transmission, press **MON** to store the frequency into the current monitor memory. Or, press ▲ or ▼ to continue the search.

   Note: You can halt the limit search by pressing **LIMIT**. `-H-` appears.

   - Press ▲ or ▼ to step through the frequencies one at a time.
   - Press **MON** to store the frequency into the current monitor memory.
   - Press **LIMIT** to return to the limit search.

Direct Search

Direct search lets you search up or down from a frequency stored in a channel.

1. Press **MANUAL**, enter the channel number, then press **MANUAL** again to select the channel that has the frequency you want to start searching from.
2. Press ▲ or ▼ to search up or down from the selected frequency. `-d-` appears on the display.
3. When the scanner stops on a transmission, press **MON** to store that frequency in the current monitor memory. Or, press ▲ or ▼ to continue the search.

Note: You can halt the direct search by pressing **LIMIT**. `-h-` appears on the display.

- Press ▲ or ▼ to step through the frequencies one at a time.
- Press **MON** to store the frequency into the current monitor memory.
- Press **LIMIT** to return to the direct search.

Search Skip

You can skip specified frequencies during a limit or direct search. This lets you avoid frequencies that you know have data tones or that you have already stored in a channel. You can program up to 50 skip frequencies in the scanner's memory.

Notes:

- If you program more than 50 skip frequencies, the new frequencies replace the first ones you stored.
- You can select the skipped frequency when the scanner is halted. The scanner displays **L/O** when you select a skipped frequency.

To skip a frequency, press **S/S/L-OUT** when the scanner stops on the frequency during a limit or direct search.

To remove the frequency from skip memory, halt the search and select the frequency, then press **S/S/L-OUT** until **L/O** disappears from the display.

Reviewing Skip Frequencies

Follow these steps to see which skip frequencies you have stored.

1. During a limit or direct search, press **SHIFT**. **SFT** appears on the display.
2. Press **RVW**. The first skip frequency appears on the display. Use ▲ or ▼ to review the other skip frequencies.

Automatically Storing Frequencies

You can have your scanner automatically store active frequencies into empty channels within the banks you specify.

1. Press **PROG** then **LIMIT**. **Lo** appears.
2. Use the number keys to enter the lower limit of the frequency range you want to search, then press **E/WX**.

   Notes: If you enter an invalid frequency in Step 2 or 4, the scanner displays **Error**. Simply repeat the step.
3. Press **LIMIT**. **Hi** appears.
4. Use the number keys to enter the upper limit of the frequency range you want to search, then press **E/WX**.
5. Press **AUTO**. **AUTO** and the numbers **1–10** flash on the display.
6. Using the number keys, enter the numbers of the banks where you want to store frequencies.

   Notes:

   - To select bank 10, press **0**.
   - If you select a bank that does not contain any empty channels, the scanner beeps and **FULL** appears for 2 seconds.
   - To unselect the bank, press the bank number again.
7. Press ▲ to search from the lower to the upper limit, or ▼ to search from the upper to lower limit. **AUTO** and the selected bank number flash on the display.

   When the scanner finds a transmission, it checks to see if the frequency is in another channel. If not, the scanner stores the frequency, then searches for more transmissions and stores their frequencies in empty channels in the selected banks.
8. To stop storing frequencies, press **MANUAL**.

When all channels fill, the scanner beeps twice and **End** appears for 2 seconds, then the scanner goes to the channel where it stored the last frequency.

LISTENING TO MONITOR MEMORIES

Once you have stored frequencies using a direct or limit search, you can listen to monitor memories by pressing **MANUAL**, **MON**, and then the number for the monitor memory you want to listen to.

MOVING A FREQUENCY FROM A MONITOR MEMORY TO A CHANNEL

1. Press **MANUAL**.
2. Enter the number of the channel where you want to store the monitor frequency, then press **PROG**. PGM appears on the display.
3. Press **MON**, then enter the monitor memory number that contains the frequency you want to store. The selected channel number flashes
4. Press **E/WX**. The scanner stores the frequency into the selected channel.

USING THE KEYLOCK

Once you program your scanner, you can protect it from accidental program changes by turning on the keylock feature. In this mode, only the **SCAN**, **MANUAL**, and **KEYLOCK** keys function.

To turn on keylock, press and hold **KEYLOCK** until K/L appears on the display.

To turn off keylock, press and hold **KEYLOCK** until K/L disappears.

SCANNING THE CHANNELS

To begin scanning the channels, press **SCAN**. The scanner scans through all non-locked channels in the activated banks. (See "Locking Out Channels" and "Turning Channel-Storage Banks On and Off.")

Note: If the scanner does not scan, be sure you have set **SQUELCH** so you do not hear the hissing sound between transmissions.

Locking Out Channels

You can increase the effective scanning speed by locking out channels that have a continuous transmission, such as a weather channel.

To lock out a channel, manually select the channel then press **S/S/L-OUT** so L/O appears on the display.

To remove the lock-out from a channel, manually select the channel then press **S/S/L-OUT** so L/O disappears from the display.

To unlock all channels in selected banks, select the banks while the scanner is scanning. Then press manual and hold **S/S/L-OUT** until the scanner beeps twice.

Notes:

- There must be at least one active channel in each bank. You cannot lock out all channels.
- You can manually select then review the channels you have locked.

Follow these steps to manually select locked-out channels.

1. Press **MANUAL**.
2. Press **SHIFT**. SFT appears on the display.
3. Press **RVW**. The next locked-out channel appears. Repeatedly press **RVW** to see the locked-out channels in sequence.

Turning Channel-Storage Banks On and Off

You can turn each channel-storage bank on and off. When you turn off a bank, the scanner does not scan any of the 20 channels in that bank.

While scanning, press the number key corresponding to the bank you want to turn on or off. If the memory bank number at the top of the display is on, the bank is turned on and the scanner scans all channels within that bank that are not locked out. If the indicator is off, the scanner does not scan any of the channels within that bank.

Notes:

- You can manually select any channel in a bank, even if the bank is turned off.
- There must be at least one active bank. You cannot turn off all banks.

MANUALLY SELECTING A CHANNEL

You can continuously monitor a specific channel without scanning. This is useful if you hear an emergency broadcast on a channel and do not want to miss any details (even though there might be periods of silence) or if you want to monitor a specific channel.

To manually select a channel, press **MANUAL**, enter the channel number, then press **MANUAL** again.

Or, if your scanner is scanning and stops at the desired channel, press **MANUAL** one time. Pressing **MANUAL** additional times causes your scanner to step through the channels.

SPECIAL FEATURES

DELAY

Many agencies use a two-way radio system that might have a period of 2 or more seconds between a query and a reply. To keep from missing a reply on a specific channel, you can program a 2- or 4-second delay.

Follow these steps to switch between the 2- or 4-second delay time and then program a channel with that delay time.

1. Turn off the scanner.
2. Press and hold **DELAY**, then turn on the scanner. **2 SEC** or **4 SEC** appears on the display for 3 seconds.
3. To program a delay on a specific channel, select the channel, then press **DELAY** so **DLY** appears on the display.

PRIORITY

You can scan through the programmed channels and still not miss an important or interesting call on a specific channel which you designate as the priority channel.

To program a stored channel as the priority channel, press **PROG**, the desired channel number, then **H/S/PRIORITY**. **P** appears beside the channel number.

Note: You can only select one channel at a time as the priority channel.

To turn on the priority feature, press **H/S/PRIORITY** during scanning. **PRI** appears on the display. The scanner checks the priority channel every 2 seconds, and stays on the channel if there is activity. **P** appears on the display whenever the scanner is set to the priority channel.

To turn off the priority feature, press **H/S/PRIORITY** until **PRI** disappears from the display.

USING THE DISPLAY BACKLIGHT

You can turn on the display's backlight for easy viewing in the dark. Press ⚹●⚹/KEYLOCK to turn on the display light for 15 seconds. To turn off the light sooner, press ⚹●⚹/KEYLOCK again.

Note: Do not hold down ⚹●⚹/KEYLOCK for longer than about 1 second. Doing so locks the keypad.

USING THE PROGRAMMABLE ATTENUATOR

To reduce interference or noise caused by signals from a strong local broadcast, you can reduce the scanner's sensitivity by turning on the attenuator. This feature is especially useful in the WFM mode.

You can program the attenuator on each channel or use this function during a limit or direct search.

1. Press SHIFT. SFT appears on the display.
2. Press ATT until ATT appears on the display.

To turn off this function, press SHIFT then press ATT until ATT disappears.

USING AUTO SORTING

You can set the scanner so it scans from the channel with the lowest frequency to the channel with the highest frequency instead of from the lowest channel to the highest channel. The scanner scans faster when auto sorting is turned on.

Follow these steps to turn on auto sorting.

1. Turn off the scanner.
2. Press and hold AUTO, then turn on the scanner. ON SORT appears on the display for 3 seconds. During scanning AUTO appears on the display.

To turn off auto sorting, repeat Steps 1–2. OFF SORT appears on the display for 3 seconds.

SKIPPING DATA SIGNALS

You can set the scanner so it skips nonmodulated or data signals (such as preamble signals for pagers or control frequencies for trunked systems) during a limit or direct search.

Note: This feature does not work in the AM mode.

Follow these steps to skip the data signals.

1. Press SHIFT. SFT appears on the display.
2. Press $\overline{\text{DATA}}$ until $\overline{\text{DATA}}$ appears on the display.

To turn off this feature, press SHIFT then press $\overline{\text{DATA}}$ until $\overline{\text{DATA}}$ disappears.

TURNING ON OR OFF THE KEY TONE

To turn off the key tone beep, follow these steps.

1. Turn off the scanner.
2. Press and hold ➢●≤/KEYLOCK and turn on the scanner. `OFF bEEP` appears.

To turn on the beep, repeat Steps 1–2. `On bEEP` appears.

CHANGING THE FREQUENCY STEP

The scanner automatically selects the frequency step for each frequency range. However, you can manually change the frequency step while the scanner is searching for frequencies.

1. Press SHIFT. `SFT` appears on the display.
2. Press STEP until the desired frequency step appears (`5 kHz`, `12.5 kHz`, or `25 kHz`).

CHANGING THE MODULATION MODE

Your scanner receives amplitude modulated (AM), narrow-band frequency modulated (NFM), or wide-band FM (WFM) transmissions. It selects the mode most commonly used in each frequency range. However, you can manually change the mode while the scanner is searching for frequencies. The selected mode flashes if it is not the default.

Follow these steps to change the modulation mode.

1. Press SHIFT. `SFT` appears on the display.
2. Press MODE until the desired modulation mode (`AM`, `NFM`, or `WFM`) flashes in the display.

To return to the default modulation mode, press MODE until the mode no longer flashes.

A GENERAL GUIDE TO SCANNING

Reception of the frequencies covered by your scanner is mainly "line-of-sight." That means you usually cannot hear stations that are beyond the horizon. During the summer months, you might be able to hear stations in the 30-50 MHz range located several hundred or even thousands of miles away. This is because of summer atmospheric conditions. This type of reception is unpredictable but often very interesting!

GUIDE TO FREQUENCIES

National Weather Frequencies

1. 161.650
2. 161.775
3. 162.400
4. 162.425
5. 162.440
6. 162.450
7. 162.475
8. 162.500
9. 162.525
10. 162.550
11. 163.275

Ham Radio Frequencies

Ham operators often transmit emergency information when other communication methods break down. The following chart shows the frequencies that Hams use:

Wavelength (meters)	Frequency (MHz)
10-meter	28.000–29.700
6-meter	50.000–54.000
2-meter	144.000–148.000
70-cm	420.000–450.000

Citizens Band Frequencies

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	26.965	21	27.215
2	26.975	22	27.225
3	26.985	23	27.255
4	27.005	24	27.235
5	27.015	25	27.245
6	27.025	26	27.265
7	27.035	27	27.275
8	27.055	28	27.285
9	27.065	29	27.295
10	27.075	30	27.305
11	27.085	31	27.315
12	27.105	32	27.325
13	27.115	33	27.335
14	27.125	34	27.345
15	27.135	35	27.355
16	27.155	36	27.365
17	27.165	37	27.375
18	27.175	38	27.385
19	27.185	39	27.395
20	27.205	40	27.405

Birdie Frequencies

Every scanner has birdie frequencies. Birdies are signals created inside the scanner's receiver. These operating frequencies might interfere with broadcasts on the same frequencies. If you program one of these frequencies, you hear only noise on that frequency. If the interference is not severe, you might be able to turn **SQUELCH** clockwise to cut out the birdie. You can also use the search skip memories to avoid unwanted birdie frequencies.

Here are the birdie frequencies on this unit that you might want to watch for:

38.4000	311.7500	313.1625	497.7500
74.2000	312.2875	322.1625	818.9750
115.2375	312.3000	341.8500	818.9875
132.2750	312.3125	345.7125	820.7000
137.6400	312.3250	368.7000	908.4500
137.6500	312.4625	380.8875	967.8000
230.4750	312.4750	403.3375	1083.9500
288.0875	313.1250	428.6125	1083.9875
288.1000	313.1375	628.6250	1114.0500
311.7375	313.1500	455.3500	1260.3000
			1290.4000

To find the birdies in any receiver, begin by disconnecting the antenna and moving it away from the receiver. Make sure that no other nearby radio or TV sets are turned on near the receiver. Use the search function and scan every frequency range from its lowest frequency to the highest. Occasionally, the searching will stop as if it had found a signal, often without any sound. That is a birdie. Make a list of all the birdies in your scanner for future reference.

GUIDE TO THE ACTION BANDS

United States Broadcast Bands

In the United States, there are several broadcast bands. The standard AM and FM bands are probably the most well known. There are also four television audio broadcast bands—the lower three transmit on the VHF band and the fourth transmits on the UHF band.

Frequency Range	Allocation
54.0–72.0 MHz	VHF Television
76.0–88.0 MHz	VHF Television
88.0–108.0 MHz	Standard FM
174.0–216.0 MHz	VHF Television
470.0–805.75 MHz	UHF Television

International Broadcast Bands

Several shortwave bands are allocated for international broadcasting because of the nature of propagation of high frequencies. The bands are sometimes identified according to the approximate wavelength of the signals in meters. Your scanner can receive the 11-meter band, from 25.6–26.10 MHz.

Typical Band Usage

HF Band (3.00–30.0 MHz)	
Mid Range	25.00–28.63 MHz
10-Meter Amateur Band	28.00–29.70 MHz
High Range	29.70–29.90 MHz
VHF Band (30.00–300.0 MHz)	
Low Range	30.00–50.00 MHz
6-Meter Amateur	50.00–54.00 MHz
FM-TV Audio Broadcast, Wide Band	54.00–72.00 MHz
Land Mobile Service	72.00–76.00 MHz
FM-TV Audio Broadcast, Wide Band	76.00–88.00 MHz
FM Radio Broadcast, Wide Band	88.00–108.00 MHz
Aircraft	108.00–136.00 MHz
U.S. Government	138.00–144.00 MHz
2-Meter Amateur	144.00–148.00 MHz
High Range	148.00–174.00 MHz
FM-TV Audio Broadcast, Wide Band	174.00–216.00 MHz
New Mobile Narrow Band	220.00–222.00 MHz
1.3-Meter Amateur	222.00–225.00 MHz
Military Aircraft	225.00–287.80 MHz
UHF Band (300.00 MHz–3.0 GHz)	
Military Aircraft	311.00–384.00 MHz
U. S. Government	406.00–450.00 MHz
0.6-Meter Amateur	420.00–450.00 MHz
Low Range	450.00–470.00 MHz
FM-TV Audio Broadcast, Wide Band	470.00–806.00 MHz
Conventional Systems	851.00–856.00 MHz
Conventional/Trunked Systems	856.00–861.00 MHz
Trunked Systems	861.00–866.00 MHz
Public Safety	866.00–869.00 MHz
Common Carrier	869.00–894.00 MHz
Private Trunked	935.00–940.00 MHz
General Trunked	940.00–941.00 MHz

Primary Usage

As a general rule, most of the radio activity is concentrated on the following frequencies:

VHF Band

Activities	Frequencies
Government, Police, and Fire	153.785–155.980 MHz
Emergency Services	158.730–159.460 MHz
Railroad	160.000–161.900 MHz

UHF Band

Activities	Frequencies
Land-Mobile "Paired" Frequencies	450.000–470.000 MHz
Base Stations	451.025–454.950 MHz
Mobile Units	456.025–459.950 MHz
Repeater Units	460.025–464.975 MHz
Control Stations	465.025–469.975 MHz

Note: Remote control stations and mobile units operate at 5 MHz higher than their associated base stations and relay repeater units.

Specified Intervals

Frequencies in different bands are accessible only at specific intervals.

For example:

Band Type	Specified Interval
VHF, HAM, and Government	5.0 kHz steps
All Others	12.5 kHz steps
Aircraft	25.0 kHz steps

Note: Your scanner rounds the entered frequency to the nearest valid frequency. For example, if you try to enter 151.473, the scanner accepts this as 151.470.

Band Allocation

To help you decide which frequency ranges to search, use the following listing of the typical services that use the frequencies your scanner receives. These frequencies are subject to change, and might vary from area to area. For a more complete listing, refer to the "Police Call Radio Guide including Fire and Emergency Services," available at your local Radio Shack store.

Abbreviations

AIR ..... Aircraft
BIFC ..... Boise (ID) Interagency Fire Cache
BUS ..... Business
CAP ..... Civil Air Patrol
CB ..... Citizens Band
CCA ..... Common Carrier
CSB ..... Conventional Systems
CTSB ..... Conventional/Trunked Systems
FIRE ..... Fire Department
HAM ..... Amateur (Ham) Radio
GOVT ..... Federal Government
GMR ..... General Mobile Radio
GTR ..... General Trunked
IND ..... Industrial Services
(Manufacturing, Construction, Farming, Forest Products)
MAR ..... Military Amateur Radio
MARI ..... Maritime Limited Coast
(Coast Guard, Marine telephone, Shipboard Radio, Private stations)
MARS ..... Military Affiliate Radio System
MED ..... Emergency/Medical Services
MIL ..... U.S. Military
MOV ..... Motion Picture/Video Industry
NEW ..... New Mobile Narrow
NEWS ..... Relay Press (Newspaper reporters)
OIL ..... Oil/Petroleum Industry
POL ..... Police Department
PUB ..... Public Services
(Public Safety, Local Government, Forestry Conservation)
PSB ..... Public Safety
PTR ..... Private Trunked
ROAD ..... Road & Highway Maintenance
RTV ..... Radio/TV Remote Broadcast Pickup
TAXI ..... Taxi Services

TELB ..... Mobile Telephone
TELC ..... (Aircraft, Radio Common Carrier, Landline companies)
TELM ..... Cordless Phones
TOW ..... Telephone Maintenance
TRAN ..... Tow Trucks
TSB ..... Transportation Services (Trucks, Tow Trucks, Buses, Railroad, Other)
TVn ..... Trunked Systems
USXX ..... FM-TV Audio Broadcast
UTIL ..... Government Classified
WTHR ..... Power & Water Utilities
..... Weather

High Frequency (HF)—(3 MHz–30 MHz)

High Band—(25.00–27.63 MHz)

25.020–25.320 ..... IND
25.870–26.470 ..... RTV
26.62 ..... CAP
26.966–27.405 ..... CB
27.430–27.630 ..... BUS

10-Meter Amateur Band—(28.0-29.7 MHz)

28.000–29.700 ..... HAM

Very High Frequency (VHF)—(30 MHz-300 MHz)

Low Band—(29.7–50 MHz—in 5 kHz steps)

29.700–29.790 ..... IND
29.900–30.550 ..... GOVT, MIL
30.580–31.980 ..... IND, PUB
32.000–32.990 ..... GOVT, MIL
33.020–33.980 ..... BUS, IND, PUB
34.010–34.990 ..... GOVT, MIL
35.020–35.980 ..... BUS, PUB, IND, TELM
36.000–36.230 ..... GOVT, MIL
36.250 ..... Oil Spill Clean up
36.270–36.990 ..... GOVT, MIL
37.020–37.980 ..... PUB, IND
38.000–39.000 ..... GOVT, MIL
39.020–39.980 ..... PUB
40.000–42.000 ..... GOVT, MIL, MARI
42.020–42.940 ..... POL
42.960–43.180 ..... IND
43.220–43.680 ..... TELM, IND, PUB
43.700–44.600 ..... TRAN
44.620–46.580 ..... POL, PUB
46.600–46.990 ..... GOVT, TELC
47.020–47.400 ..... PUB
47.420 ..... American Red Cross
47.440–49.580 ..... IND, PUB
49.610–49.990 ..... MIL, TELC

6-Meter Amateur Band—(50-54 MHz)

50.00–54.00 ..... HAM

FM-TV Audio Broadcast, Wide Band—(54–72 MHz)

59.750 ..... TV2
65.750 ..... TV3
71.750 ..... TV4

Land Mobile Service Band (72–76 MHz)

FM-TV Audio Broadcast, Wide Band (76–88 MHz)

81.750 ..... TV5
87.750 ..... TV6

FM Radio Broadcast, Wide Band (88–108 MHz)

Aircraft Band (108–136 MHz)

108.000–121.490	AIR
121.500	AIR Emergency
121.510–136.000	AIR

U.S. Government Band (138–144 MHz)

137.000–144.000	GOVT, MIL

2-Meter Amateur Band (144–148 MHz)

144.000–148.000	HAM

VHF-HI BAND (148–174 MHz)

148.050–150.345	CAP, MAR, MIL
150.775–150.790	MED
150.815–150.965	TOW
150.980	Oil Spill Clean up
150.995–151.130	ROAD
151.145–151.475	POL
151.490–151.955	IND, BUS
151.985	TELM
152.0075	MED
152.030–152.240	TELB
152.270–152.465	IND, TAXI
152.480	BUS
152.510–152.840	TELB
152.870–153.020	IND, MOV
153.035–153.725	IND, OIL, UTIL
153.740–154.445	PUB, FIRE
154.490–154.570	IND, BUS
154.585	Oil Spill Clean-Up
154.600–154.625	BUS
154.655–156.240	MED, ROAD, POL, PUB
156.255	OIL
156.275–157.425	MARI
157.450	MED
157.470–157.515	TOW
157.530–157.725	IND, TAXI
157.740	BUS
157.770–158.100	TELB
158.130–158.460	BUS, IND, OIL, TELM, UTIL
158.490–158.700	TELB
158.730–159.465	POL, PUB, ROAD
159.480	OIL
159.495–161.565	TRAN
161.580	OIL
161.600–162.000	MARI, RTV
162.0125–162.35	GOVT, MIL, USXX

162.400–162.550	WTHR
162.5625–162.6375	GOVT, MIL, USXX
162.6625	MED
162.6875–163.225	GOVT, MIL, USXX
163.250	MED
163.275–166.225	GOVT, MIL, USXX
166.250	GOVT, RTV, FIRE
166.275–169.400	GOVT, BIFC
169.445	Wireless Mikes
169.500	GOVT
169.505	Wireless Mikes
169.55–169.9875	GOVT, MIL, USXX
170.000	BIFC
170.025–170.150	GOVT, RTV, FIRE
170.175–170.225	GOVT
170.245–170.305	Wireless Mikes
170.350–170.400	GOVT, MIL
170.425–170.450	BIFC
170.475	PUB
170.4875-173.175	GOVT, PUB, Wireless Mikes
173.225–173.375	MOV, NEWS, UTIL
173.3875–173.5375	MIL
173.5625–173.5875	MIL Medical/Crash Crews
173.60–173.9875	GOVT

FM-TV Audio Broadcast, VHF Wide Band (174–216 MHz)

179.750	TV7
185.750	TV8
191.750	TV9
197.750	TV10
203.750	TV11
209.750	TV12
215.750	TV13

New Mobile Narrow Band (220–222 MHz)

220.000–222.000	NEW

1.3-Meter Amateur Band (222–225 MHz)

222.000–225.000	HAM

Military Aircraft Band (237.9–287.8 MHz)

237.900	Coast Guard Search & Rescue
239.800	FAA Weather
241.000	Army
243.000	Emergency
255.400	FAA Flight Service
257.800	Civilian Towers
287.800	Coast Guard Air/Sea Rescue

Ultra High Frequency (UHF)—(300 MHz–3 GHz)

Military Aircraft Band (319.1–383.9 MHz)

319.100	FAA Air Traffic Control
321.000–336.600	Air Force
342.500–344.600	FAA Weather
346.400–364.200	Air Force Air Traffic Control
381.800–383.900	Coast Guard

U. S. Government Band (406–450 MHz)

406.125–419.975	GOVT, USXX

70-cm Amateur Band (420–450 MHz)

420.000–450.000	HAM

Low Band (450–470 MHz)

450.050–450.925	RTV
451.025–452.025	IND, OIL, TELM, UTIL
452.0375–453.00	IND, TAXI, TRAN TOW, NEWS
453.0125–453.9875	PUB
454.000	OIL
454.025–454.975	TELB
455.050–455.925	RTV
457.525–457.600	BUS
458.025–458.175	MED
460.0125–460.6375	FIRE, POL, PUB
460.650–462.175	BUS
462.1875–462.450	BUS, IND
462.4625–462.525	IND, OIL, TELM, UTIL
462.550–462.725	GMR
462.750–462.925	BUS
462.9375–463.1875	MED
463.200–467.925	BUS

FM-TV Audio Broadcast, UHF Wide Band (470–512 MHz)
(Channels 14 through 69 in 6 MHz steps)

475.750	Channel 14
481.750	Channel 15
487.750	Channel 16
..	
..	
..	
..	
..	
805.750	Channel 69

Note: Some cities use the 470–512 MHz band for land/mobile service.

Conventional Systems Band—Locally Assigned

851.0125–855.9875	CSB

Conventional/Trunked Systems Band—Locally Assigned

856.0125–860.9875	CTSB

Trunked Systems Band—Locally Assigned

861.0125–865.9875	TSB

Public Safety Band—Locally Assigned

866.0125–868.9875	PSB

Common Carrier

869.010–894.000	CCA

Private Trunked

935.0125–939.9875	PTR

General Trunked

940.0125–940.9875	GTR

FREQUENCY CONVERSION

The tuning location of a station can be expressed in frequency (kHz or MHz) or in wavelength (meters). The following information can help you make the necessary conversions.

1 MHz (million) = 1,000 kHz (thousand)

To convert MHz to kHz, multiply by 1,000:

9.62 MHz x 1000 = 9620 kHz

To convert from kHz to MHz, divide by 1,000.

2780 kHz ÷ 1000 = 2.780 MHz

To convert MHz to meters, divide 300 by the number of megahertz.

300 ÷ 7.1 MHz = 42.25 meters

TROUBLESHOOTING

If you have problems, here are some suggestions which might help. If none of these suggestions help, take your scanner to your local Radio Shack store for assistance.

PROBLEM	POSSIBLE CAUSE	REMEDY
Scanner is totally inoperative.	No power.	Check the batteries, or make sure you plugged the scanner into a working AC or DC outlet.
Scanner is on but will not scan.	**SQUELCH** is not correctly adjusted.	Adjust **SQUELCH** clockwise.
While scanning, the scanner locks on frequencies that have an unclear transmission.	"Birdies."	Avoid programming frequencies listed under "Birdie Frequencies" on Page 35 or only listen to them manually.
Keyboard does not work.	Keylock is activated.	Press and hold **KEY-LOCK** until K/L disappears.

CARE AND MAINTENANCE

Your PRO-26 200-Channel Direct Entry Programmable Scanner is an example of superior design and craftsmanship. The following suggestions will help you care for the PRO-26 so you can enjoy it for years.

Keep the scanner dry. If it gets wet, wipe it dry immediately. Liquids can contain minerals that can corrode the electronic circuits.

Use only fresh batteries of the recommended size and type. Always remove old and weak batteries. They can leak chemicals that destroy electronic circuits.

Handle the scanner gently and carefully. Dropping it can damage circuit boards and cases and can cause the scanner to work improperly.

Use and store the scanner only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries and distort or melt plastic parts.

Keep the scanner away from dust and dirt, which can cause premature wear of parts.

Wipe the scanner with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the scanner.

Modifying or tampering with your scanner's internal components can cause a malfunction and might invalidate the scanner's warranty and void your FCC authorization to operate it. If your scanner is not operating as it should, take it to your local Radio Shack store for assistance.

SPECIFICATIONS

Frequency Coverage and Default Modulation Modes

25.0000 –	28.9950 MHz	.AM (in 5.0 kHz steps)
29.0000 –	53.9950 MHz	NFM (in 5.0 kHz steps)
59.7500 –	71.7500 MHz	WFM (in 6.0 MHz steps)
72.0000 –	75.9950 MHz	NFM (in 5.0 kHz steps)
81.7500 –	87.7500 MHz	WFM (in 6.0 MHz steps)
88.1000 –	107.9000 MHz	WFM (in 200.0 kHz steps)
108.0000 –	136.9875 MHz	.AM (in 12.5 kHz steps)
137.0000 –	173.9950 MHz	NFM (in 5.0 kHz steps)
179.7500 –	215.7500 MHz	WFM (in 6.0 MHz steps)
216.0000 –	224.9950 MHz	NFM (in 5.0 kHz steps)
225.0000 –	399.9875 MHz	.AM (in 12.5 kHz steps)
400.0000 –	511.9875 MHz	NFM (in 12.5 kHz steps)
517.7500 –	805.7500 MHz	WFM (in 6.0 MHz steps)
806.0000 –	823.9375 MHz	NFM (in 12.5 kHz steps)
851.0000 –	868.9375 MHz	NFM (in 12.5 kHz steps)
896.1125 –	1300.0000 MHz	NFM (in 12.5 kHz steps)

General

Channels of Operation . . . . . Any 200 Channels in Any Band Combinations (20 channels x 10 banks) and 10 monitor channels

Sensitivity (20 dB S/N with 60% modulation for AM; 3 kHz deviation for NFM; 30 dB S/N with 22.5 kHz deviation for WFM)

NFM S+N/N=20dB	40.84	MHz	.0.5 µV
	162.4	MHz	.0.6 µV
	453.25	MHz	.0.6 µV
	954.9125	MHz	.0.8 µV
	1299.9125	MHz	.1.0 µV
WFM S+N/N=30dB	62.45	MHz	.5.0 µV
	195.5	MHz	.5.0 µV
	531.5	MHz	.5.0 µV
	765.25	MHz	.5.0 µV

AM	25.5	MHz	1.3 µV
S+N/N=20dB	108.5	MHz	1.5 µV
	127.175	MHz	1.5 µV
	230.05	MHz	1.5 µV
	325.05	MHz	2.0 µV

Direct Search Speed/Limit Search Speed:

Normal Mode ..... 100 Steps/Sec.
Hyper Mode (for only 5 kHz step band) ..... 300 Steps/Sec.
Scan Speed ..... 50 Channels/Sec.
Priority Sampling ..... 2 Seconds
Delay Time ..... 2 or 4 Seconds (Selectable)
IF Frequencies ..... 1st IF 380.7 MHz or 254.4 MHz
2nd IF 58.075 MHz
3rd IF 455 kHz (NFM)
or 5.5 MHz (WFM)
Audio Power ..... 250 mW Maximum
Built-in Speaker ..... $1^{7}/_{16}$-inch (36mm) 8-Ohm, Dynamic Type
Maximum Current Drain ..... 220 mA
Power Requirement ..... 4 AA batteries (6 volts),
AC Adapter Cat. No. 20-188,
or DC Adapter Cat. No. 270-1560
Dimensions ..... $6^{1}/_{16} \times 2^{5}/_{8} \times 1^{5}/_{8}$ Inches (HWD)
(154 × 66 × 42 mm)
Weight ..... 8.47 oz (240 g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

SCANNING LEGALLY

Scanning is a fun and interesting hobby. You can hear police and fire departments, ambulance services, government agencies, private companies, amateur radio services, aircraft, and military operations. It is legal to listen to almost every transmission your scanner can receive. However, there are some electronic and wire communications that are illegal to intentionally intercept. These include:

- Telephone conversations (cellular, cordless, or other private means of telephone signal transmission)
- Pager transmissions
- Scrambled or encrypted transmissions

According to the Federal Electronic Communications Privacy Act (ECPA), as amended, you could be fined and possibly imprisoned for intentionally listening to, using, or disclosing the contents of such a transmission unless you have the consent of a party to the communication (unless such activity is otherwise illegal). These laws change from time to time and there might be state or local laws that also affect legal scanner usage.